

**Before The  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

DOCKET FILE COPY ORIGINAL

**RECEIVED**

DEC 17 1997

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of

Advanced Television Systems  
and Their Impact Upon the  
Existing Television Broadcast  
Service

)  
)  
)  
)  
)  
)

MM Docket No. 87-268

To: The Commission

**COMMENTS**

Milwaukee Area Technical College District Board (Board), through its attorneys, files its Comments in the above-captioned proceeding, in response to the Commission's invitation to address issues posed by the recent filing by the Association for Maximum Service Television (MSTV). In support thereof, the following is shown:

1. The Board is licensee of public television Station WMVT, Channel 36, and public television Station WMVS, Channel 10, at Milwaukee, Wisconsin. The Board is also grantee of an experimental television facility on Channels 33, 34, 35 and 42 at Milwaukee (Letter dated March 21, 1997, FCC Reference 1800E-1KRH), which is designed to identify reception problems in the Milwaukee area and to determine the best configuration of antenna parameters and antenna location.
2. MSTV's filing discusses DTV-to-DTV adjacent channel interference and proposes numerous changes to the DTV Table, including a change from DTV Channel 35 to DTV Channel 61 for the Board's Station WMVT at Milwaukee.
3. Attached hereto is a Statement from Jan Louis Pritzl, the Board's Coordinator of TV Technical Facilities. As set forth in detail in that Statement, the Board


No. of Copies rec'd  
List ABCDE

0+4

- a. strongly opposes the MSTV proposal to change the DTV assignment for Station WMVT from Channel 35 to Channel 61 and to increase radiated power from 57.6 kW to 92.4 kW;
- b. urges that a power increase to 151 kW for DTV Channel 35 authorized to Station WMVT is essential for full replication and reduced interference;
- c. requests that the pending application by Station WMVT, NTSC Channel 36, seeking power and height increases (File No. BPET-940610KE), should be granted as soon as technically possible; and
- d. submits that Station WMVT must retain the current DTV Channel \*35 assignment with an allowed increase in height and power to provide maximum public television service with minimal interference to the Milwaukee audience when collocated on a new tower in 1998/99.

Respectfully submitted,

MILWAUKEE AREA TECHNICAL COLLEGE  
DISTRICT BOARD

By:   
Robert A. Woods

SCHWARTZ, WOODS & MILLER  
1350 Connecticut Avenue, N.W.  
Suite 300  
Washington, D.C. 20036

202/833-1700

Its Attorneys



1036 North Eighth Street  
Fourth Floor  
Milwaukee, WI 53233-1400  
414-271-1036  
414-291-7536 (FAX)

**December 15, 1997**

**Mr. Jan Louis Pritzl  
WMVS / WMVT  
1036 North 8th Street  
Milwaukee, WI 53233**

**Mr. Richard M. Smith  
Chief of the Office of Engineering and Technology  
Federal Communications Commission  
1919 M Street, N.W.  
Washington, D.C. 20554**

**Re: Comments on MM Docket No. 87-268 MSTV Filing**

**Dear Mr. Smith:**

**I am writing with concern for and suggestions to correct problems with the November 20th MSTV *ex parte* submission which proposes a WMVT, Channel 36, DTV assignment move from 35 to 61 and an increase in radiated power from 57.6 kW to 92.4 kW. While the MSTV suggested changes appear to improve coverage for WMVT through reduced DTV interference they would create additional hardships in both present and future costs, NTSC/DTV interference from the new power assigned to Channel 35 and loss of adjacent channel control.**

**The existing FCC table assignments for Milwaukee, Wisconsin are:**

**Channel 8 ( 9.5 kW) is assigned to WMVS Ch 10**

**Channel 22 ( 50.0 kW) is assigned to WVCY Ch 30**

**Channel 25 (106.4 kW) is assigned to WCGV Ch 24**

**Channel 28 (1,000 kW) is assigned to WTMJ Ch 4**

**Channel 33 (1,000 kW) is assigned to WITI Ch 6**

**Channel 34 (797.1 kW) is assigned to WISN Ch 12**

**Channel 35 ( 57.1 kW) is assigned to WMVT Ch 36**

**Channel 46 (133.7 kW) is assigned to WDJT Ch 58**

**Channel 61 (497.5 kW) is assigned to WVTM Ch 18**

**Milwaukee Public &  
Educational Television**

*MPTV is an Affirmative Action/Equal Opportunity Institution and  
complies with all requirements of the Americans With Disabilities Act*

WMVS & WMVT are currently collocated with WVTM, Ch 18, and will relocate to a new tower 340 feet SE of the existing structure late in 1998. This new tower will be a candelabra designed to support the nine (9) DTVs assigned to Milwaukee in an effort to eliminate some non-collocation interference issues.

The WISN and WDJT towers are approximately 2.42 km (1.5 miles) NW of our tower and the three other existing towers are within 0.4 km to our South.

We are very concerned, and totally against, the reassignment / exchange of Channels 35 and 61 due to the loss of control over the channel adjacent to NTSC 36. The current FCC table assigns adjacent channels to common owners (24/25 & 35/36) to facilitate inter-transmitter phase locking and power ratio control to minimize interference. This assignment policy should remain in place.

While it seems prudent to mate higher powers on adjacent channels, it also seems best to place a lower powered DTV channel next to NTSC Channel 36. Please consider our 1994 FCC filed request (BPET-940610KE) to improve the NTSC 36 height and power as we move to our new tower. We are requesting 343 meter HAAT with a directional ERP of 4,770 kW (36.78 dBK) and Grade B contour of 56 miles on the radial of maximum ERP. This should result in a DTV power reassignment of approximately 151 kW (21.78 dBK) which would reduce the interference ratio between Channel 34 at 776.2 kW and Channel 35. Using F(50,90) propagation data the Grade B maximum DTV Field Strength would be 42.1 dB uV/M.

If WVTM-DTV is reassigned to Channel 35 and allowed to operate at the MSTV suggested 310 kW (24.9 dBK) there would be additional interference to NTSC Channel 36 presently operating at 2,340 kW (33.7 dBK). This power difference of 8.79 dB is significantly less than the 12 dB used in setting the FCC RF Mask. However, if WMVT retains DTV 35 and radiates 151 kW the power difference of 15 dB would provide ample NTSC protection as demonstrated in the published Zenith paper by Messrs. Eilers and Scignoli which was also filed as Exhibit 2B by MSTV.

Increasing the Channel 35 ERP would also improve the Public TV service in Milwaukee without the added cost of a like increase if moved to DTV 61.

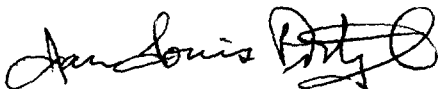
Emerging "combined channel" transmitter technology promises to allow the currently assigned DTV 35 / NTSC 36 channel pair to be modulated and amplified using a single transmitter. This would only be practical if these adjacent channels remain licensed to a single entity. The efficiency of operation, equipment purchase and replacements costs, and maintenance needed for this type of operation would be lower. Also the added cost of moving our DTV from an out-of-core channel in the future is something that would be an added burden to our licensee, the Milwaukee Area Technical College Board.

In summary:

- The proposed MSTV channel exchange is unacceptable due to interference and cost issues.
- A power increase for DTV 35 to 151 kW is essential for full replication and reduced interference.
- The WMVT NTSC 36 filing, No. BPET-940610KE, requesting power and height increases, should be granted as soon as technically possible.
- WMVT must retain the current DTV 35 assignment with an allowed increase in height and power to provide maximum Public Television service with minimal interference to the Milwaukee audience when collocated on a new tower in 1998/99.

Thank you for your previous work and the many opportunities to comment during formation of DTV rulings. Please keep the WMVT concerns uppermost in your deliberations toward final table assignments.

Respectfully submitted,



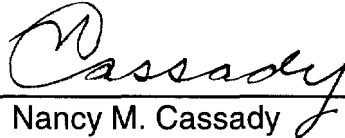
Jan Louis Pritzl  
Coordinator of TV Technical Facilities

## CERTIFICATE OF SERVICE

I, Nancy M. Cassady, Secretary in the law offices of Schwartz, Woods & Miller, hereby certify that I have on this 17th day of December, 1997, sent by First Class United States mail, postage prepaid, copies of the foregoing **COMMENTS** to:

Mr. Victor Tawil, Senior Vice President  
Assn. For Maximum Service Television, Inc.  
1776 Massachusetts Avenue, N.W.  
Suite 310  
Washington, DC 20036

Jonathan D. Blake, Esquire  
Ellen P. Goodman, Esquire  
Covington & Burling  
1201 Pennsylvania Avenue, N.W.  
P. O. Box 7566  
Washington, DC 20044-7566

  
\_\_\_\_\_  
Nancy M. Cassady